Summary of EPA's Consultations on Pacific Salmonids and Steelhead

Background

Under Section 7(a)(2) of the ESA, Federal agencies must ensure that the "actions" they authorize will not result in jeopardy or adversely modify designated critical habitat for species listed as endangered or threatened by FWS and/or NMFS (jointly the Services).

EPA's Office of Pesticide Programs (OPP) issues decisions on the registration and registration review of pesticides as it authorizes the sale, distribution, and use of pesticides according to the product labeling. EPA is required under ESA and its implementing regulations to determine whether these actions "may affect" listed species (which it does by developing a biological evaluation (BE) for each of the chemicals) followed by formal consultation in cases when EPA's BE concludes that the chemical is likely to adversely affect (LAA) listed species. An informal consultation with the Services may be concluded if the Services concur with EPA's BE that the chemical is not likely to adversely affect (NLAA) listed species. If EPA determines that the chemical will have no effect (NE) on listed species, there is no requirement for consultation. Once a consultation occurs, the Services issue a biological opinion (BiOp) indicating whether EPA's action results in likely jeopardy to listed species. If jeopardy is found, the BiOp includes the Service's recommended reasonable and prudent alternatives (RPAs) to avoid jeopardy, and reasonable and prudent measures (RPMs) to limit the impact of any expected incidental take, which action agencies and others must follow in order for any incidental take to be authorized.

Washington Toxics Coalition (WTC) v. EPA (Salmonid Consultations)

On January 30, 2001, the WTC, *et al.*, filed suit against the EPA in the Western District of Washington, alleging that EPA had failed to consult with the NMFS on whether hundreds of pesticides posed jeopardy to 28 federally listed Pacific salmon and steelhead. On July 2, 2002, the court found that EPA violated the Endangered Species Act (ESA) by failing to consult with NMFS with respect to 55 pesticides for which the plaintiffs had established standing. The court further put EPA on a 2 ½ year schedule to make effects determinations and initiate consultation as necessary on those pesticides.

The plaintiffs also sought additional injunctive relief. On January 22, 2004, the District Court issued an Order granting interim injunctive relief to the WTC pending EPA's compliance with the ordered schedule for review of these pesticides and the completion of any associated consultation with NMFS. The January 2004 order:

- Imposed no-use buffer zones around Salmon Supporting Waters (as defined by the Court) in Washington, Oregon and California where the court ordered that specific pesticides could not be used.
- Required EPA to develop a point-of-sale notification that contains specified text and a prominent graphic for pesticides containing any of seven named active ingredients and used in Urban Areas as defined by the Court. The seven pesticide active ingredients are: 2,4-D, carbaryl, diazinon, diuron, malathion, triclopyr BEE, and trifluralin.

Implementation Status

Buffer Zone Implementation
Subject to certain limited exceptions, the court order established the following no-use buffer zones for pesticide applications adjacent to salmon-supporting waters:

- 20-yard buffer zone for most ground pesticide applications;
- 100-yard buffer zone for aerial applications.

These buffers were (and in some cases remain) in effect until EPA completes its consultation obligations including finding that a pesticide has no effect on the species, receipt of a BiOp from NMFS, or a finding by EPA that the pesticide is not likely to adversely affect the species with no affirmative rejection of that finding by NMFS. For chlorpyrifos, diazinon, malathion, carbaryl and methomyl, the terminating events are set forth in the 2014 stipulated settlement in NCAP v. EPA[1].

Distribution of the Point-of-Sale Notification:
The defendant-intervenors in this case (groups representing pesticide manufacturers, distributors and pesticide users) were ordered to distribute the point-of-sale notification to retail outlets in urban areas of Washington, Oregon and California.

EPA, in turn, was ordered to provide the point-of-sale notification to State Fish Agencies, Pesticide State Lead Agencies, and Land Grant University Extension Coordinators in Urban Areas by April 5, 2004. Consistent with the court order, EPA also requested that these entities provide notification to certified applicators in the state who are certified in any category that would permit the applicator to apply pesticides in parks, golf courses and housing areas in the Urban Areas.

Status of Consultation:
The Agency met its December 1, 2004, deadline to complete the review of the 55 pesticides as ordered by the court on July 2, 2002. For 37 pesticides, EPA determined there may be effects to one or more of the listed Pacific salmon or steelhead and therefore initiated consultation with the NMFS. NMFS issued 7 Biological Opinions (BiOps) to date covering 31 pesticide active ingredients as summarized in the table below. Biological opinions are not planned for two active ingredients (lindane and molinate) because they have been prohibited since 2009. Biological opinions are forthcoming for bromoxynil and prometryn in December 2019 and metolachlor and 1,3-D (telone) in December 2020.

BiOp 1 was remanded and vacated by the 4th circuit court in 2013. The active ingredients included in the first 2 BiOps are the subject of the pilot ESA nationwide pesticide consultation process, which are subsumed by the ongoing nationwide consultations. The conditions of the BiOp on thiobencarb (BiOp #6) have been met. The remaining BiOps have not been

[1] NCAP sued EPA in 2010, asserting that EPA was in violation of ESA sections 7 and 9 for its failure to implement the 2008 and 2009 biological opinions addressing these pesticides. EPA settled the case in 2014 by agreeing to put the 2004 interim measures back in place until NMFS completes new biological opinions for these pesticides.

implemented because of concerns with the Biological Opinion methodology and practicality of the mitigation measures.

Table 1. Summary of Biological Opinions Issued in Response to Initiation of Consultation Due to Washington Toxics Coalition (WTC) v. EPA

BiOp # and Year	Pesticide a.i.	Conclusions	Comments	Implementation Status
1 (2008)	Chlorpyrifos, diazinon and malathion	Jeopardy to all 28 listed Pacific salmonids and adverse modification to 26 critical habitats (two species do not have critical habitat designations).	EPA had concerns with the BiOp including: lack of transparency on how jeopardy determinations were made; impractical limitations on pesticide use and inadequate time to discuss proposed measures with pesticide users; and unrealistic expectations for monitoring and reporting.	This BiOp was vacated and remanded by the 4th Circuit in 2013 (*Dow v. NMFS*) and reissued in December 2017 per a stipulated settlement in *NCAP v. NMFS*.
2 (2009)	Carbaryl, carbofuran and methomyl	Jeopardy or Adverse Modification for a subset of Listed Salmonids	Same concerns as noted previously apply to this BiOp as well. While this BiOp was not challenged, NMFS agreed in an out-of-court settlement to conduct a new nationwide consultation on the carbamates following the National Academy of Sciences (NAS) recommendations and EPA's planned submission of a new BE. EPA has not issued that BE to date, and NMFS has therefore not issued a revised carbamate BiOp.	Methomyl and carbaryl have been subsumed by the nationwide consultations that are planned to be completed as part of the NAS implementation pilot process.
3 (2010)	Azinphos-methyl, dimethoate, disulfoton, ethoprop, fenamiphos, methamidophos, methidathion, methyl-parathion, naled, phorate, phosmet, bensulide	No Jeopardy or Adverse Modification (due to cancellation): Azinphos-methyl, disulfoton, fenamiphos, methamidophos, or methyl parathion Jeopardy or Adverse Modification for a subset of Listed Salmonids: Bensulide, dimethoate, ethoprop, methidathion, naled, phorate, and phosmet	Same concerns as noted previously apply to this BiOp as well.	There has been no new litigation regarding EPA's failure to implement this BiOp. Concerns with the BiOp have made it difficult to implement.

BiOp # and Year	Pesticide a.i.	Conclusions	Comments	Implementation Status
4 (2011)	2,4-D, captan, chlorothalonil, diuron, linuron, triclopyr	Jeopardy or Adverse Modification: 2,4-D (jeopardy for all species) Adverse modification for subset of species: Chlorothalonil and diuron No jeopardy or Adverse Modification: Captan, linuron, or triclopyr	Same concerns as noted previously apply to this BiOp as well.	There has been no new litigation regarding EPA's failure to implement this BiOp. Concerns with the BiOp have made it difficult to implement.
5 (2012)	Oryzalin, pendimethalin, trifluralin (dinitroanaline herbicides)	Oryzalin, pendimethalin, and trifluralin are likely to jeopardize the continued existence of some listed Pacific salmonids and adversely modify designated critical habitat of some listed salmonids.	Same concerns as noted previously apply to this BiOp as well.	There has been no new litigation regarding EPA's failure to implement this BiOp. Concerns with the BiOp have made it difficult to implement. EPA has proposed (oryzalin, trifluralin) or required (pendimethalin) spray drift reduction measures for these pesticides through its registrations review process. EPA issued the interim decision (ID) for pendimethalin in May of 2018 and plan to complete IDs for oryzalin and trifluralin in September 2019.
6 (2012)	Thiobencarb	Thiobencarb is not likely to jeopardize the continued existence of three listed Pacific salmonid or adversely modify their designated critical habitat considering existing state programs that mitigate risks.	California is the only state within the range of listed Pacific salmonids that has approved the use of thiobencarb, and use is only approved for rice. As a result, the BiOp focused on three listed Pacific salmon located in California's Central Valley where rice is grown.	Implemented. Early engagement between NMFS, EPA, the California Department of Pesticide Regulation, the registrant, and the California Rice Commission allowed EPA and NMFS to develop bulletins that required applicators to follow the California Department of Pesticide Regulation's preexisting permitting requirements for thiobencarb use on rice in California. EPA also proposed spray drift reduction measures in the

BiOp # and Year	Pesticide a.i.	Conclusions	Comments	Implementation Status
				proposed interim decision (PID) for thiobencarb. The ID is scheduled for September 2019.
7 (2015)	Diflubenzuron, fenbutatin oxide and propargite	Diflubenzuron: Jeopardy to 23 of 28 listed Pacific salmonids and adverse modification to 23 of 26 critical habitats. Fenbutatin oxide and propargite: Jeopardy to 21 of 28 listed Pacific salmonids and adverse modification to 21 of 26 critical habitats.	Same concerns as noted previously apply to this BiOp as well. NOAA Fisheries worked with the U.S. Environmental Protection Agency, U.S. Department of Agriculture, and the pesticide registrants on suggested changes to the pesticide labels before completing the biological opinion.	EPA may propose additional mitigation measures during the registration review process for these pesticides.
8 (2019) and 9 (2020)	Prometryn and bromoxynil metolachlor and 1,3-D (telone)	N/A	NMFS has a court order to complete endangered species consultations on EPA's registration of bromoxynil (Dec. 2019), prometryn (Dec. 2019), 1,3-D (Dec. 2020) and racemic metolachlor (Dec. 2020).	NMFS has recently asked the NCAP v. NMFS court to modify the 2019 deadline for bromoxynil and prometryn until one year from the date EPA issues a new BE for these pesticides. That motion is still pending with the court.